

GenCore version 4.5
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OM nucleic - nucleic search, using sw model

Run on: February 3, 2000, 14:19:01; Search time 2265.46 Seconds
(without alignments)
136.391 Million cell updates/sec

Title: US-08-962-560A-3

Perfect score: 1235
Sequence: 1 CGAGGCTCAACCTCCGGCGG.....AGAAAAAAAAAAAAAAAA 1235

Scoring table: IDENTITY_NUC
Gapop 10.0, Gapext 1.0

Searched: 311585 seqs, 125096042 residues

Total number of hits satisfying chosen parameters: 623170

Minimum DB seq length: 0

Maximum DB seq length: 1000000

Post-Processing: Minimum Match 0%

Listing first 45 summaries

Database: N_Geneseq_36.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Length	ID	Description
1	1235	100.0	1	Mus musculus SOCS1
2	1084.4	87.8	1	Rattus norvegicus
3	1072.2	86.8	1	CDNA encoding a ST
4	990.2	55.9	1	Homo sapiens SOCS1
5	95.6	7.7	2342	Human EPRG1 CDNA #
6	95.6	7.7	2342	Human EPRG1 CDNA #
7	91.4	7.4	2187	Mus musculus SOCS3
8	87	7.0	2378	Human secreted pro
9	69.6	5.6	1374	Human cytokine-ind
10	69.6	5.6	1374	Human cytokine-ind
11	64.4	5.2	114955	Human adenosine A1
12	53.8	4.4	114955	Human adenosine A1
13	50	4.0	43280	Tyrosine synthase
14	49.8	4.0	12001	HSV-2 strain SB5 C
15	49.8	4.0	117213	HSV-2 strain SB5 C
16	49	4.0	799	Nucleotide sequenc
17	49	4.0	9600	Vector plasmid PCM
18	49	4.0	10596	Plasmid pCISBON f
19	49	4.0	10596	Plasmid pCISBON f
20	49	4.0	10596	Nucleotide sequenc
21	49	4.0	10596	Rhinodine receptor
22	48	3.9	795	FLGA insert stabl
23	47.4	3.8	3198	Human IL-1ra BAC c
24	46.2	3.7	12001	HSV L/ST region. H
25	46	3.7	8638	DNA encoding pseud
26	45.2	3.7	835	Modified human adi
27	45.2	3.7	847	Human adipisin/D CD
28	45.2	3.7	1093	Human adipisin gene
29	45	3.6	4897	Pseudotubules virus
30	44.4	3.6	1680	Complete sequence
31	44.4	3.6	1722	Sequence of the co
32	44.2	3.6	1266	Brt-3a polynucleot
33	44	3.6	201	Signal portion of
34	43.8	3.5	833	snab gene encoding

35	43.8	3.5	1170	1	020217	Sequence of tuft3 g
36	43.6	3.5	1512	1	V23482	Pseudomonas xcp3 s
37	43.6	3.5	4356	1	037543	Cardiac adenylyl c
38	43.6	3.5	4356	1	037543	Cardiac adenylyl c
39	43.6	3.5	17612	1	095540	Pseudomonas xpc, O
40	43.2	3.5	201	1	N70195	Streptomyces prote
41	43.2	3.5	3917	1	T31723	K-ras oncogene, Pr
42	43.2	3.5	1601	1	T06981	S. clavuligerus ly
43	43	3.5	30001	1	T61016	Total DNA sequence
44	43	3.5	30001	1	X05110	S. aureofaciens DN
45	42.8	3.5	1121	1	V38660	Mus musculus SOCS2

ALIGNMENTS

RESULT 1	V38659	standard; DNA; 1235 BP.
ID	V38659	
AC	27-OCT-1998	(first entry)
DE	Mus musculus SOCS1 gene.	
KW	SOCS1: suppressor of cytokine signaling; PCR primer;	
KW	autoimmune disease; diagnosis; cancer; treatment;	
KW	cytokine mediated cellular responsiveness; hyperimmunity;	
OS	Mus musculus.	
FT	key	Location/Qualifiers
FT	CDS	161..799
FT	/*tag= a	/product= SOCS1 protein
FT	/*tag= a	/product= SOCS1 protein
PD	14-MAY-1998	W09820023-A1.
PF	31-OCT-1997	AU0729.
PR	14-FEB-1997	AU-005117.
PR	01-NOV-1996	AU-003384.
PA	(HALL-) HALL INST MEDICAL RES WALTER & ELIZA.	
PI	Alexander WS, Hilton DJ, Metcalf D, Nicholson SE,	
PI	Nicola NA, Richardson RT, Starr R, Viney EM, Willson TA;	
DR	WPI: 96-286854/25.	
DR	P-PDB: W62613.	
PT	Suppressor of cytokine signaling proteins - useful to treat	
PT	disease, injury or abnormality involving cytokine mediated cellular	
PT	responsiveness e.g. hyperimmunity, immunosuppression, allergies and	
PT	hypertension	
PS	Claim 14; Page 108-109; 325pp; English.	
CC	The sequence is that of a gene encoding a suppressor of cytokine	
CC	signalling protein (SOCS). SOCS can be used to screen for naturally	
CC	occurring antibodies to SOCS, which may occur, e.g. in some autoimmune	
CC	diseases. Alternatively, specific antibodies can be used to	
CC	screen for SOCS, which is useful as a knowledge of SOCS levels	
CC	may be important for the diagnosis of certain cancers. Injury or	
CC	SOCS polypeptides can be used to treat disease, injury or	
CC	abnormality involving cytokine mediated cellular responsiveness,	
CC	e.g. hyperimmunity, immunosuppression, allergies and hypertension.	
CC	Sequence 1235 BP; 192 A; 421 C; 347 G; 275 T;	
SO		
Query Match	100.0%; Score 1235; DB 1; Length 1235;	
Best Local Similarity	100.0%; Pred. No. 1.4e-245;	
Matches 1235; Conservative	0; Mismatches 0; Indels 0; Gaps 0;	
DB	1 CGAGGCTCAAGCTCCGGGCGGATTCGGTCCGCTCCGCTCTGGGGGCTGTGGCC	60
DB	1 CGAGGCTCAAGCTCCGGGCGGATTCGGTCCGCTCCGCTCTGGGGGCTGTGGCC	60
DB	1 CGAGGCTCAAGCTCCGGGCGGATTCGGTCCGCTCCGCTCTGGGGGCTGTGGCC	60
DB	61 GACCGTGCACACCGGAGCCCGGCTCACTGCTGCTCCCATATGAGGACAGCCCG	120
DB	61 GACCGTGCACACCGGAGCCCGGCTCACTGCTGCTCCCATATGAGGACAGCCCG	120
DB	61 GACCGTGCACACCGGAGCCCGGCTCACTGCTGCTCCCATATGAGGACAGCCCG	120
DB	121 GACGCTATGAGCCACCCCTCAGCTGAGGCTCGAGTAGATGATGACGACCAACAGT	180
DB	121 GACGCTATGAGCCACCCCTCAGCTGAGGCTCGAGTAGATGATGACGACCAACAGT	180
DB	121 GACGCTATGAGCCACCCCTCAGCTGAGGCTCGAGTAGATGATGACGACCAACAGT	180

QY 181 GGCAGCCCAATGCGATCTCCCGGCGAGAGCCCGGAGGGGTGAGAGCCCTCTC 240
DB 181 GGCAGCCCAATGCGATCTCCCGGCGAGAGCCCGGAGGGGTGAGAGCCCTCTC 240
QY 241 GTCCGCTCTCTGCTGCTGCGGAGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 300
DB 241 GTCCGCTCTCTGCTGCTGCGGAGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 300
QY 301 AGCCCAAGCCCGGCGGAGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 360
DB 301 AGCCCAAGCCCGGCGGAGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 360
QY 361 CATCAGGCGGAGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 420
DB 361 CATCAGGCGGAGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 420
QY 421 GCAGCGGCGGAGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 480
DB 421 GCAGCGGCGGAGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 480
QY 481 TCGTCAAGGAGGAGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 540
DB 481 TCGTCAAGGAGGAGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 540
QY 541 CCGGCTGCACTTCCAGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 600
DB 541 CCGGCTGCACTTCCAGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 600
QY 601 CTTTTCAGGCTGCTGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 660
DB 601 CTTTTCAGGCTGCTGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 660
QY 661 GCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 720
DB 661 GCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 720
QY 721 GGGTGGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 780
DB 721 GGGTGGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 780
QY 781 CTTCCCTTCCAGATCTGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 840
DB 781 CTTCCCTTCCAGATCTGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 840
QY 841 TTATTTCTAT 900
DB 841 TTATTTCTAT 900
QY 901 GGGTGGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 960
DB 901 GGGTGGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 960
QY 961 CCCACCTCTCAAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 1020
DB 961 CCCACCTCTCAAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 1020
QY 1021 GTAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 1080
DB 1021 GTAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 1080
QY 1081 ATTCCAGATCTTTCAGCAAAACAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 1140
DB 1081 ATTCCAGATCTTTCAGCAAAACAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 1140
QY 1141 TGTGAGAGATATCTATATATATATATATATATATATATATATATATATATAT 1200
DB 1141 TGTGAGAGATATCTATATATATATATATATATATATATATATATATATATAT 1200
QY 1201 AAGTTTTTTTTTAAAGAAAAA 1235
DB 1201 AAGTTTTTTTTTAAAGAAAAA 1235

RESULT 2
V38663
ID V38663 standard; DNA; 2807 BP.
AC V38663;
DE 27-OCT-1998 (first entry)
KW Rattus norvegicus SOCS1 gene.
KW SOCS; suppressor of cytokine signaling; PCR primer;
KW autoimmune disease; diagnosis; cancer; treatment;
KW cytokine mediated cellular responsiveness; hyperimmunity;
KW immunosuppression; allergies; hypertension; ss.
OS Rattus norvegicus.
FH Key location/Qualifiers
FT 1739..2377
FT CDS
FT /tag- a
FT /product- SOCS1 protein
FN W09820023-A1.
PD 14-MAY-1998.
PE 31-OCT-1997; AU0729.
PR 14-FEB-1997; AU-005117.
PR 01-NOV-1996; AU-003384.
PA (HALL-) HALL INST MEDICAL RES WALTER & ELIZA.
PI Alexander WS, Hilton DJ, Metcalf D, Nicholson SE.
PI Nicola NA, Richardson RT, Starr R, Viney EM, Willison TA.
DR WPI: 98-286854/25.
DR P-PSDB: W62617.
PT Suppressor of cytokine signaling proteins - useful to treat
PT disease, injury or abnormality involving cytokine mediated cellular
PT responsiveness e.g. hyperimmunity, immunosuppression, allergies and
PT hypertension.
PS Claim 14; Page 117-118; 325pp; English.
CC The sequence is that of a gene encoding a suppressor of cytokine
CC signaling protein (SOCS). SOCS can be used to screen for naturally
CC occurring antibodies to SOCS, which may occur, e.g. in some autoimmune
CC diseases. Alternatively, specific antibodies can be used to
CC screen for SOCS, which is useful as a knowledge of SOCS levels
CC may be important for the diagnosis of certain cancers, injury or
CC SOCS polypeptides can be used to treat disease, injury or
CC abnormality involving cytokine mediated cellular responsiveness,
CC e.g. hyperimmunity, immunosuppression, allergies and hypertension.
SQ Sequence 2807 BP; 507 A; 906 C; 899 G; 495 T;

Query Match 87.8%; Score 1084.4; DB 1; Length 2807;
Best Local Similarity 94.4%; Pred. No. 1.6e-214;
Matches 1159; Conservative 0; Mismatches 61; Indels 8; Gaps 3;

QY 1 CGAGGCTAAGCTCCGGGCGGAGTCTGCTGCTCCGCTCCTGCGGCTGTTGCC 60
DB 1579 CGAGGCTAAGCTCCGGGCGGAGTCTGCTGCTCACCCTGCTGCGGCTGCC 1638
QY 61 GAGGCTGCAAGCGGAGGCGGCGGCTCAGTCTGCTGCTCCCATCAGGAGCCCG 120
DB 1639 GAGGCTGCAAGCGGAGGCGGCGGCTCAGTCTGCTGCTCCCATCAGGAGCCCG 1638
QY 121 GAGGCTATGCGGAGGCGGCGGCTCAGTCTGCTGCTGCTGCTGCTGCTGCTGCT 180
DB 1699 GAGGCTATGCGGAGGCGGCGGCTCAGTCTGCTGCTGCTGCTGCTGCTGCTGCT 1758
QY 181 GGCAGCCCAATGCGATCTCCCGGCGAGAGCCCGGAGGGGTGAGAGCCCTCTC 240
DB 1759 GGCAGCCCAATGCGATCTCCCGGCGAGAGCCCGGAGGGGTGAGAGCCCTCTC 1818
QY 241 GTCCGCTCTCTGCTGCTGCGGAGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 300
DB 1819 GTCCGCTCTCTGCTGCTGCGGAGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 1878
QY 301 AGCCCAAGCCCGGCGGAGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 360
DB 1879 GGCAGCCCAATGCGATCTCCCGGCGAGAGCCCGGAGGGGTGAGAGCCCTCTC 1938
QY 361 CATCAGGCGGAGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 420

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Db 1939 CATACACGCGACAGCGCTCTCTCGACGCGCTTCTACTGGGAGACCCCTGAGCGT 1998
QY 421 GCACGGGGGCGACAGCGGCTGGCTGCCGAGCCCGTGGGCACTTCTGTGGCGACAG 480
Db 1999 GCAATGGGGGCGACAGAGGCTGGCTGCCGAGCCCGTGGGCACTTCTGTGGCGACAG 2058
QY 481 TCGTCAACGGAAGTCTCTCTCTCGGCTCAAGCTGAAGATGGCTCGGGGCCACGAGCAT 540
Db 2059 TCGCCACGCGGAAGTCTCTCTCTCGGCTCAAGCTGAAGATGGCTCGGGGCCACGAGCAT 2118
QY 541 CCGCGTCACTTCCAGCGCGCGCTTCCACTTGAACGCGAGCGCGGAGACCTTGCAGT 600
Db 2119 TCGTGGTCACTTCCAGCGCGCGCTTCCACTTGAACGCGAGCGCGGAGACCTTGCAGT 2178
QY 601 CCGTTCGAGCTCTGAGACACTACGTGGCGGGGCGCGCGCGGATTTGGGGGCGCGCT 660
Db 2179 CCGTTCGAGCTCTGAGACACTACGTGGCGGGGCGCGCGCGGATTTGGGGGCGCGCT 2238
QY 661 GCGCCAGCGCGCGCTGGCGCGCGCTGCGAGAGCTGTCCGCAAGCATGTGGCGCGCT 720
Db 2239 GCGCCAGCGCGCGCTGGCGCGCGCTGCGAGAGCTGTCCGCAAGCATGTGGCGCGCT 2298
QY 721 GGGTCGCGAGAACCTGGCGCGCGCTCTTAAACCGGATCTCGTACTCTGAGTTC 780
Db 2299 GGGTCGCGAGAACCTGGCGCGCGCTCTTAAACCGGATCTCGTACTCTGAGTTC 2358
QY 781 CTTCGCCCTCCAGACTGACAGCGGCTGGCGCGCTGG -CCGAGCATTAAGTGGGGCGCTT 839
Db 2359 CTTCGCCCTCCAGACTGACAGCGGCTGGCGCGCTGGCGAGATTAAAGTGGAGCGCTT 2418
QY 840 ATTATTTCTTATTAATTAATTAATTAATTAATTTCTGAGAACAGTGGAGCGCTCCCGCGC 899
Db 2419 ATTATTTCTTATTAATTAATTAATTAATTTCTGAGAACAGTGGAGCGCTCCCGCGC 2478
QY 900 TGGGTGGAGGAGAGTGTGGAGGGTGAAGTCCCTCCACTTGTGGCTGAGAACCTCA 959
Db 2479 TAGGTGGAGGAGAGTGTGGAGGGTGAAGTCCCTCCACTTGTGGCTGAGAACCTCA 2538
QY 960 TCCCACTGTCAGGGGGTGGGGGTGCCCTCCCTGGTGGTCCCTGGGGTCCCGCTGGT 1019
Db 2539 TCCCGGCTTC-----GGGGGGCTCCCTCCCTGGTGGTCCCTGGGGTCCCGCTGGT 2591
QY 1020 TGTAGCAGCTTGTCTGTGGGGCGAGAGCTGAATTCACCTCTACCTCTCATGTTTACA 1079
Db 2592 TGTAGCAGCTTGTCTGTGGGGCGAGAGCTGAATTCACCTCTACCTCTCATGTTTACA 2651
QY 1080 TATTCGCAATCTTGTGCAACAAGGGGTGGGGAGGGTCTGTGGCTTCAATTTTCTG 1139
Db 2652 TATTCGCAATCTTGTGCAACAAGGGGTGGGGAGGGTCTGTGGCTTCAATTTTCTG 2711
QY 1140 CTGTGAGAAATCTATTTATTTATTTTACAGCAAGTTAGTAAATTAATTTATG 1199
Db 2712 CTGTGAGAAATCTATTTATTTATTTTACATTCAGTTAATTAATTTATTTATG 2771
QY 1200 AAAGTTTTTTTAAAGAAAAAAA 1227
Db 2772 AAAGTTTTTTTAAAGAAAAAGA 2799

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RESULT 3

V42701 V42701 standard; cDNA; 1087 BP.

AC V42701;

DE 30-OCT-1998 (first entry)

DE cDNA encoding a STAT function regulatory protein designated SIRS-1.

KW SIRS-1; STAT-induced inhibitor; STAT function;

KW JAK/STAT signal transduction system; STAT3; STAT6; inhibit;

KW tyrosine phosphorylation; gp130; cytokine-regulating protein; CIS;

KW screen; cytokine regulatory; inhibitory activity; ds.

OS Mus sp.

FH Key Location/Qualifiers

FT CDS 16..654

FT tag- a

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PN W09830688-A1.
PD 16-JUL-1998.
PF 23-OCT-1997; J03860.
PR 10-JAN-1997; JP-014737.
PA (KISHU) KISHIMOTO T.
PI Naka T.
DR WPI: 98-399137/34.
DR P-PEDB: W70962.
PR STAR function regulatory protein - used in screening candidate
PS substances for cytokine regulatory activity
PS Claim 5; Pages 39-41; 60pp; Japanese.
CC The present sequence encodes a protein (designated SIRS-1, STAT-induced
CC inhibitor of STAR function 1) which regulates STAR protein function in
CC the JAK/STAT signal transduction system in mammalian cells. The protein
CC is induced by STAT3 or STAT6. It inhibits tyrosine phosphorylation of
CC STAT3 and of gp130. The SIRS-1 protein sequence contains an SH2 domain
CC and is related to the cytokine-regulating protein CIS. SIRS-1, or
CC substances for cytokine regulatory or inhibitory activity.
Sequence 1087 BP; 171 A; 363 C; 305 G; 248 T;

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Query Match 86.8%; Score 1072.2; DB 1; Length 1087;
 Best Local Similarity 99.3%; Pred. No. 4.1e-212;
 Matches 1077; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

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QY 146 GCGCCCTGAGTAGAGTAGAGTACGACGCAACAGTGGAGCGGACATGCGATCTCCCG 205
Db 1 GCGCCCTGAGTAGAGTAGAGTACGACGCAACAGTGGAGCGGACATGCGATCTCCCG 60
QY 206 GCAGAGAGAGCCCGGAGGGGGTCAAGAGCCCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 265
Db 61 GCAGAGAGAGCCCGGAGGGGGTCAAGAGCCCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 120
QY 266 GCGCCCTGAGTCCCGGCGCTGCGCGGCTGCCAGGCGCGCGCGCGCGCGCGCGCGCG 325
Db 121 GCGCCCTGAGTCCCGGCGCTGCGCGGCTGCCAGGCGCGCGCGCGCGCGCGCGCGCGCG 180
QY 326 TTCCGCACTTCCTGCTCCCATCTCGATTAACGGGGGAGTACAGCGGAGCGGCTGCTG 385
Db 181 TTCCGCACTTCCTGCTCCCATCTCGATTAACGGGGGAGTACAGCGGAGCGGCTGCTG 240
QY 386 GAGCGCTCGGCTTATTTATTTGAGGAGCCCTGAGCGTGAAGGAGGAGGAGGAGGAGGAG 445
Db 241 GAGCGCTCGGCTTATTTATTTGAGGAGCCCTGAGCGTGAAGGAGGAGGAGGAGGAGGAG 300
QY 446 GCGGAGCCCGTGGGACCTTCTGTGGCGGAGTGTCAACGAGACTGCTTCTGCGG 505
Db 301 GCGGAGCCCGTGGGACCTTCTGTGGCGGAGTGTCAACGAGACTGCTTCTGCGG 360
QY 506 CTCAGCGTGAAGTGGCTTGGGGGCGGCGGCGGAGCATCCCGGTGCACTTCCAGCGGCGG 565
Db 361 CTCAGCGTGAAGTGGCTTGGGGGCGGCGGCGGAGCATCCCGGTGCACTTCCAGCGGCGG 420
QY 566 TTCCACTTGAAGCGGAGCGGAGACCTTTCAGTGCCTTTCGAGCTCTGAGACATAC 625
Db 421 TTCCACTTGAAGCGGAGCGGAGACCTTTCAGTGCCTTTCGAGCTCTGAGACATAC 480
QY 626 GTGGCGGCGCGCGCGGCGGATTTGGGGGCGCGGCTGCGGAGCGCGGCGGCGGCGG 685
Db 481 GTGGCGGCGCGCGCGGCGGATTTGGGGGCGCGGCTGCGGAGCGCGGCGGCGGCGG 540
QY 686 CAGGAGCTGTGCGGCGGAGCGGATGTGGCGGCGGCTGCGGAGAACTGGCGGCGGATC 745
Db 541 CAGGAGCTGTGCGGCGGAGCGGATGTGGCGGCGGCTGCGGAGAACTGGCGGCGGATC 600
QY 746 CCTTTAAACCGGAGTCTCGTGAATGCTTCCCTTCCAGATGAGCGGCT 805
Db 601 CCTTTAAACCGGAGTCTCGTGAATGCTTCCCTTCCAGATGAGCGGCT 660
QY 806 GCGCGTGTGCGGAGCATTAAGTGGGGGCGGCTTATTTATTTATTTATTTATTTATTT 865
Db 661 GCGCGTGTGCGGAGCATTAAGTGGGGGCGGCTTATTTATTTATTTATTTATTTATTTATTT 720

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QY 866 ATTTTCTGGAACGACGAGGAGCCCTCCCGGCTGGGTGAGGAGTGTGTGAGG 925
 DB 721 ATTTTCTGGAACGACGAGGAGCCCTCCCGGCTGGGTGAGGAGTGTGTGAGG 780
 QY 926 GTGAGATCCCTCCACTTCTGCTGAGAGACCTCATCCACCTCTCAGGGGTGGGGTCT 985
 DB 781 GTGAGATCCCTCCACTTCTGCTGAGAGACCTCATCCACCTCTCAGGGGTGGGGTCT 840
 QY 986 CCCCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1045
 DB 841 CCCCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 900
 QY 1046 ACCTGATTTCCACTCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1105
 DB 901 ACCTGATTTCCACTCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 960
 QY 1106 GGGGTGCGGAGGAGTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1165
 DB 961 GGGGTGCGGAGGAGTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1020
 QY 1166 TTTACAGCCAGTTAGTAAATTAATTTATTTATTTATTTATTTATTTATTTATTTATTT 1225
 DB 1021 TTTACAGCCAGTTAGTAAATTAATTTATTTATTTATTTATTTATTTATTTATTTATTT 1080
 QY 1226 AAAA 1230
 DB 1081 AAAA 1085
 RESULT 4
 ID V38662 standard: DNA: 1094 BP.
 AC V38662:
 27-OCT-1998 (first entry)
 DE Homo sapiens SOCS1 gene.
 KW SOCS; suppressor of cytokine signaling; PCR primer;
 KW autoimmune disease; diagnosis; cancer; treatment;
 KW cytokine mediated cellular responsiveness; hyperimmunity;
 OS immunosuppression; allergies; hypertension; ss.
 OS Homo sapiens.
 FH Key Location/Qualifiers
 FT CDS 24..659
 FT /tag- a
 FT /product- SOCS1 protein
 PN M09820023-A1.
 PD 14-MAY-1998.
 PF 31-OCT-1997; A00729.
 PR 01-FEB-1997; A0-005117.
 PR 01-NOV-1996; A0-003384.
 PA (HALL-) HALL INST MEDICAL RES WALTER & ELIZA.
 PI Alexander WS, Hilton DJ, Metcalf D, Nicholson SE,
 PI Nicola NA, Richardson RT, Starr R, Viney EM, Willson TA;
 DR WPI: 98-286854/25.
 DR P-PSDB: W62616.
 PT Suppressor of cytokine signaling proteins - useful to treat
 PT disease, injury or abnormality involving cytokine mediated cellular
 PT responsiveness e.g. hyperimmunity, immunosuppression, allergies and
 PT hypertension
 PS Claim 14; Page 115-116; 325pp: English.
 CC The sequence is that of a gene encoding a suppressor of cytokine
 CC signaling protein (SOCS). SOCS can be used to screen for naturally
 CC occurring antibodies to SOCS, which may occur, e.g. in some autoimmune
 CC diseases. Alternatively, specific antibodies can be used to
 CC screen for SOCS, which is useful as a knowledge of SOCS levels
 CC may be important for the diagnosis of certain cancers. Soluble
 CC SOCS polypeptides can be used to treat disease, injury or
 CC abnormality involving cytokine mediated cellular responsiveness,
 CC e.g. hyperimmunity, immunosuppression, allergies and hypertension.
 SQ Sequence 1094 BP; 167 A; 381 C; 313 G; 233 T;

Query Match 55.9%; Score 690.2; DB 1; Length 1094;

Best Local Similarity 83.5%; Pred. No. 1,4e-133;
 Matches 924; Conservative 0; Mismatches 148; Indels 35; Gaps 11;
 QY 138 CTCAGATGGGCCCCCTGACAGTATGATGTATGACAGCAACGAGGTGGCCGACCAATGCGA 197
 DB 1 CTCGGGTGGGCCCCCTTGTGATGATGTATGATGATGATGATGATGATGATGATGATGATGAT 60
 QY 198 TCTCCCGGAG 257
 DB 61 TCTCCAG 117
 QY 258 CGCAG 317
 DB 118 CGCAG 177
 QY 318 ACATCACTTCCGACCTTCCGACCTTCCGACCTTCCGACCTTCCGACCTTCCGACCTTCCGAC 377
 DB 178 ACAGCACTTCCGACCTTCCGACCTTCCGACCTTCCGACCTTCCGACCTTCCGACCTTCCGAC 237
 QY 378 CGCTCTGAG 437
 DB 238 CGCTCTGAG 297
 QY 438 GGTGCTGCGGAG 497
 DB 298 GGTGCTGCGGAG 357
 QY 498 TCTTGGGCTGAG 557
 DB 358 TTTGGGCTGAG 417
 QY 558 CCGGCGGCTTCCAGCTTGGAG 617
 DB 418 CCGGCGGCTTCCAGCTTGGAG 477
 QY 618 AGCACTACAGTGGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCG 677
 DB 478 AGCACTACAGTGGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 537
 QY 678 GGGCGGTGAG 737
 DB 538 GGGCGGTGAG 597
 QY 738 CGCGCATCCCTCTTAAACCGGAGTACCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 797
 DB 598 CTGCGATCCCTCTTAAACCGGAGTACCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 657
 QY 798 GACCGGCTGCGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 857
 DB 658 GACCGGCTGCGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 709
 QY 858 TTATTTATTTATTTATTTATTTATTTATTTATTTATTTATTTATTTATTTATTTATTTATTTAT 916
 DB 709 TTATTTATTTATTTATTTATTTATTTATTTATTTATTTATTTATTTATTTATTTATTTATTTAT 768
 QY 917 TTGTG---GAGGTGAGATGCTTCCACTTCTGCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 968
 DB 769 ATGGGTGAG 828
 QY 969 TCAGAGGTGGGGGTGCT---CCCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1022
 DB 829 TCACCTCTTGAAGGGGGTCTCCCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 888
 QY 1023 AGCAGCT---TGAGTCTGGGGGAG 1076
 DB 889 AGCAGCTTACAGTATGTGAG 948
 QY 1077 ACATATCCAGTATCTTTGACAAACAG 1135
 DB 949 ACATATCCAGTATCTTTGACAAACAG 1008
 QY 1136 TCTGCTGAGAGATATTTATTTATTTATTTATTTATTTATTTATTTATTTATTTATTTATTTATTTAT 1195

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Db      1009  TCTGCTGTCGAACACCCATTTATAT-TTTTAAAGTCAGTTAGTAATAAAGTTAN 1067
Oy      1196  TATGAAGCTTTTAAAAAGAAAA 1222
          |||||
Db      1068  TATGAAGCTTTTAAAAAGAAAA 1094
          |||||

RESULT 5
V69307 standard; cDNA; 2342 BP.
ID      V69307
AC      V69307;
DT      01-FEB-1999 (first entry)
DE      Human EPRG1 cDNA #1.
KW      EPRG1; EPO primary response gene 1; diagnosis; gene therapy; immunity;
KW      disease; vaccine; inoculate; antibody; T cell; anaemia; polycythemia;
KW      cancer; neutropenia; AIDS; diabetes; myelosuppression; allergy; asthma;
KW      autoimmune disease; inflammatory disease; chromosome mapping; human; ss.
OS      Homo sapiens.
PN      EP-877030-A2.
PD      11-NOV-1998.
PE      07-MAY-1998; 303597.
PF      01-MAY-1998; US-071342.
PR      07-MAY-1997; US-045890.
PA      (SMIK ) SMITHLINE BECKMAN CORP.
PI      Dillon S, Lord K:
PI      WPI: 98-57049/49.
DR      P-FSDB: W62504.
PT      New EPO primary response gene polypeptides and polynucleotides -
PT      useful as diagnostic reagents and for prevention and treatment of
PT      cancer and autoimmune and inflammatory diseases
PS      Claim 14: Page 18-19: 25pp: English.
CC      This sequence encodes a novel human EPO primary response gene 1 (EPRG1)
CC      polypeptide. EPRG1 polypeptides and polynucleotides are useful for
CC      diagnosing a disease or susceptibility to a disease by detecting
CC      mutations in the EPRG1 gene using probes containing the EPRG1 nucleotide
CC      sequence, or determining EPRG1 polypeptide or mRNA expression levels
CC      EPRG1 polypeptides can be used to screen for agonists and antagonists
CC      which bind the EPRG1 polypeptide by measuring resulting mRNA levels with
CC      ELISA. These can be used in treatment to activate (agonist) or inhibit
CC      (antagonist) eg EPRG1 ligand, receptor or substrate) EPRG1 activity, in
CC      addition to direct administration of antisense sequences to prevent
CC      expression, or EPRG1 polypeptides to treat conditions associated with
CC      a lack of EPRG1 protein. Gene therapy may also be used to affect
CC      endogenous EPRG1 polypeptide production. EPRG1 antibodies are useful for
CC      inducing an immune response to immunise and prevent diseases, and for
CC      isolating EPRG1 clones or purifying the polypeptides by affinity
CC      chromatography. EPRG1 polypeptides can be administered directly or as a
CC      vaccine to inoculate against disease by inducing an antibody and T-cell
CC      response. Diseases diagnosed, prevented or treated include anaemia,
CC      polycythemia, cancer, neutropenia, AIDS, drug-induced anaemia, diabetes,
CC      myelosuppression, autoimmune diseases, rheumatoid arthritis and multiple
CC      sclerosis, and inflammatory diseases, including asthma and allergies. The
CC      EPRG1 polypeptide is also useful for mapping the gene to a chromosome,
CC      allowing gene inheritance to be studied through linkage analysis. The
CC      3'-UTR segment of EPRG1 RNA may be useful to screen for agents which
CC      modulate RNA stability and turnover rate.
SQ      Sequence 2342 BP; 495 A; 685 C; 655 G; 506 T;

Query Match          7.7%; Score 95.6; DB 1; Length 2342;
Best Local Similarity 59.6%; Pred. No. 3e-11;
Matches 161; Conservative 0; Mismatches 109; Indels 0; Gaps 0;

Oy      323  CACTTCGCGACCTTCGCCGATCCGACATTCACGCGGCATACGCGAGACCGCGCTC 382
          ||| ||| ||||| ||||| ||| ||||| ||| ||||| ||| ||||| |||
Db      88   CGCCTCAAGACCTTCAGCTCCCAAGAGCAGATGACAGCTGCTGTGTAAGCACTGGCGCAAG 147
          ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Oy      383  CTGACAGCCTTCGCGCTTCTATTGCGGACCCCTGAGCGTGCACGCGGCGCACAGCGGGCTG 442
          ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      148  CTGACAGGAGAGCGGCTTCTACTGCGAGCGCACTGACGCGGCGAGGAGCAACTGCTGCTC 207
          ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Oy      443  CGTGCAGAGCCCGTGGGCACTTCTGTGTGGCGGACATCTGTCACGAGAACTGCTTCTC 502
          ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||

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Db	Accession	Score	DB 1	Length	2342
Db	208	AGTGGCAGGCCGCGGACACCTTTTGATCCGGAGACGTGGACACAGGCCACTTCTTC	267		
Qy	503	GGCTCAGCGTGAAGATGGCTTCGGGGCCCGACGAGCATCCGGCTGACTTCAGGCCGCG	562		
Db	268	ACGGCTCAGCGTGAAGATGGCTTCGGGGCCCGACGAGCATCCGGCTGACTTCAGGCCGCG	327		
Qy	563	CGCTTCACCTTGGAGCGGACCGCGGACGAC	592		
Db	328	ACCTTCTCTCTGACAGAGCATCCCGGAGC	357		
RESULT	6				
Id	V69309	standard; cDNA; 2342 bp.			
AC	V69309;				
DE	01-FEB-1999 (first entry)				
DE	Human EPRG1 cDNA derived from expressed sequence tags, ESR's.				
KW	EPGR1: EPO primary response gene 1; diagnosis; gene therapy; immunity;				
KW	disease; vaccine; inoculate; antibody; T cell; anaemia; polycythemia;				
KW	cancer; neutropenia; AIDS; diabetes; myelosuppression; allergy; asthma;				
KW	autoimmune disease; inflammatory disease; chromosome mapping; human;				
KW	expressed sequence tag; EST; ss.				
OS	Homo sapiens.				
PN	EP-877030-A2.				
PD	11-NOV-1998.				
PF	07-MAY-1998; 303597.				
PF	01-MAY-1998; US-071342.				
PR	07-MAY-1997; US-045890.				
PA	(SMIK) SMITHKLINE BECKMAN CORP.				
PI	Dillon S, Lord K;				
DR	WPI: 98-570499/49.				
PT	New EPO primary response gene polypeptides and polynucleotides -				
PT	useful as diagnostic reagents and for prevention and treatment of				
PT	cancer and autoimmune and inflammatory diseases				
PS	Claim 13; Page 22-23; 25pp; English.				
CC	This sequence encodes a novel human EPO primary response gene 1 (EPGR1)				
CC	polypeptide derived from expressed sequence tags (EST's). EPGR1				
CC	susceptibility to a disease by detecting mutations in the EPGR1 gene				
CC	using probes containing the EPGR1 nucleotide sequence, or determining				
CC	EPGR1 polypeptide or mRNA expression levels EPGR1 polypeptides can be				
CC	used to screen for agonists and antagonists which bind the EPGR1				
CC	polypeptide by measuring resulting mRNA levels with ELISA. These can be				
CC	used in treatment to activate (agonist) or inhibit (antagonist eg EPGR1				
CC	ligand, receptor or substrate) EPGR1 activity, in addition to direct				
CC	administration of antisense sequences to prevent expression, or EPGR1				
CC	polypeptides to treat conditions associated with a lack of EPGR1 protein.				
CC	Gene therapy may also be used to affect endogenous EPGR1 polypeptide				
CC	production. EPGR1 antibodies are useful for inducing an immune response				
CC	to immunise and prevent diseases, and for isolating EPGR1 clones or				
CC	purifying the polypeptides by affinity chromatography. EPGR1 polypeptides				
CC	can be administered directly or as a vaccine to inoculate against disease				
CC	by inducing an antibody and T-cell response. Diseases diagnosed.				
CC	prevented or treated include anaemia, polycythemia, cancer, neutropenia,				
CC	AIDS, drug-induced anaemia, diabetes, myelosuppression, autoimmune				
CC	diseases, rheumatoid arthritis and multiple sclerosis, and inflammatory				
CC	diseases, including asthma and allergies. The EPGR1 polypeptide is also				
CC	useful for mapping the gene to a chromosome, allowing gene inheritance to				
CC	be studied through linkage analysis. The 3'-UTR segment of EPGR1 RNA may				
CC	be useful to screen for agents which modulate RNA stability and turnover				
CC	rate.				
Sequence	2342 bp;	495 A;	685 C;	655 G;	506 T;
Query Match	7.7%;	Score 95.6;	DB 1:	Length 2342;	
Best Local Similarity	59.6%;	Pred. No. 3e-11;			
Matches 161;	Conservative	0;	Mismatches 109;	Indels	0;
			Gaps	0;	
323	CACCTTCGACACCTTCGCTCCGCTCCGATTAACGGGCGCATCAGCGGACGCGGCTC	382			
88	CGCCTCAAGACCTTCAGCTCCAGAGCGAGTACACAGCTGGTGGTACAGCAGTGGCGCAAG	147			
383	CTGAGACGCTTCGCTTCATTTGGGACCCCTTGACCGTGCACGAGGCGCCACAGAGCGGCTG	442			

CC	uses).	Seq	Sequence	2378 BP;	518 A;	690 C;	662 G;	506 T;	
Query Match	7.08;	Score 87;	DB 1;	Length 2378;					
Best Local Similarity	62.48;	Pred. No. 1.8e-09;							
Matches 169;	Conservative	0;	Mismatches 100;	Indels 2;	Gaps 2;				
DB	323	CACATCCGACCTTCCTCCACTCCGATCCGATACCGGGCGATCAGCGGAGACGCGCTC	382						
DB	113	CGCCTCAGACCTTCAGTCCGACAGAGGAGACAGTGTGTG-T-AACGACATGGCGAA	171						
OY	383	CTGCAGCGCTCGCGCTTCTATTTGGGAGACCCCTAGCGCTGCACGGGGCGCAGCGCGT	442						
DB	172	GTGCAGGAGAGACCGGCTTCTACTGAGGCGCAGTGCACCGGCGGAGGAGGAACTGCTC	221						
OY	443	CGTGCAGGAGCGCGGGGACACTTCTTGATGGCGGACAG-TGTCMAAGCAATGCTCTT	501						
DB	223	ATGCGCGAGCCCGCGGACCTTCTGATCGGACAGCTCGGGACGAGCGCACTTCTT	291						
OY	502	CGCGCTCAGCGTGAAGATGCTTGCGGCGCCGACAGAGATCCGCTGACTTCCAGCGCG	561						
DB	292	CAGCGTCAAGCGCTCAGACCCAGCTGTGGACCAACACCTCGCATTCAGTGTGAGGGGG	351						
OY	562	CGCGTTCACCTTGAGCGGCGAGCGCGGAGACC	592						
DB	352	CAGCTTCTCTCTGACGACGATCCCGGAGC	382						
RESULT	9								
ID	T96002	standard; cDNA; 1374 BP.							
AC	T96002:								
DT	07-JUL-1998	(first entry)							
DE	Human cytokine-inducible SH2-containing (CIS) gene.								
KW	Human cytokine-inducible SH2-containing; CIS; erythropoietin; EPO;								
KM	tyrosine-phosphorylated interleukin; (IL)-3; signal transduction;								
KW	inhibition; anaemia; ss.								
OS	Homo sapiens.								
FH	Key	Location/Qualifiers							
FT	CDS	71..848							
FT		/*tag="a							
FT		/product="Human CIS protein"							
PN	WO9744347-A1.								
PD	21-NOV-1997.								
PF	21-MAY-1996; 007477.								
PR	21-MAY-1996; WO-007477.								
PA	(HARD) HARVARD COLLEGE.								
PI	(SMIR) SMITHKLINE BEECHAM CORP.								
PI	Dunington DD, Franlz JD, Shoelston SE.								
PI	WPI; 98-018425/02.								
PT	P-PSDB; W38319.								
PT	Human cytokine-inducible SH2-containing protein and related DNA -								
PS	useful for diagnosis of modulators for treatment of, e.g. anaemia								
PS	claim 1: Pages 34-35: 52pp: English.								
CC	This sequence encodes the human cytokine-inducible SH2-containing								
CC	(CIS) protein which binds tyrosine-phosphorylated interleukin								
CC	(IL)-3 or erythropoietin (EPO) receptors. When CIS is over expressed								
CC	signal transduction through the receptors is inhibited. Inactivation								
CC	of CIS may enhance signalling through (IL)-3 and EPO receptors.								
CC	Specific inhibitors of CIS may be useful in the treatment of anaemia.								
CC	Labelled CIS or its functional derivatives can be used in binding								
CC	assays to determine deficiency of CIS activity. Conditions associated								
CC	with CIS protein deficiency can be diagnosed by assaying for the								
CC	presence of the CIS gene. It can be used to treat conditions related								
CC	to insufficient CIS protein function.								
SO	Sequence 1374 BP;	264 A;	446 C;	379 G;	285 T;				
Query Match	5.6%;	Score 69.6;	DB 1;	Length 1374;					
Best Local Similarity	51.3%;	Pred. No. 6e-06;							
Matches 162;	Conservative	0;	Mismatches 154;	Indels 0;	Gaps 0;				

[illegible]

RESULT	10	
ID	T43380	standard; cDNA; 1960 bp.
AC	T43380;	
DT	11-MAR-1997	(first entry)
DE	Human cytokine response gene CR5.	
KW	Cytokine response gene; CR5; Interleukin-2; IL-2;	
KW	ligand-stimulated gene expression; diagnosis; therapy; ss.	
OS	Homo sapiens.	
FN	Key	Location/Qualifiers
FT	cds	112..888
FT		/*tag= a
PN	W09639427-A1.	
PD	12-DEC-1996.	
PF	05-JUN-1996;	U09194.
PR	05-JUN-1995;	US-461379.
PR	05-JUN-1995;	US-465585.
PR	05-JUN-1995;	US-462337.
PR	05-JUN-1995;	US-463081.
PR	05-JUN-1995;	US-462390.
PR	05-JUN-1995;	US-463074.
PI	(DART-) DARTMOUTH COLLEGE.	
PI	Beadling C, Smith KA;	
DR	WPI: 97-043062/04.	
DR	P-FSDB: W08137.	
PT	Cytokine response proteins and genes - used in the detection and	
PT	therapy of diseases caused by a mutation in the CR coding region	
PS	Disclosure; Page 25-27; 81pp; English.	
CC	8 Clones (T43378-83) contg. interleukin-2 (IL-2)-induced genes w/	
CC	1library following IL-2 stimulation. 6 of these ligand-induced ge	
CC	(CR1, 2, 3, 5, 6, 8) are novel. The CR5 gene encodes a 28 kDa	
CC	protein (W08137) that shows homology to src homology 2 (SH2)	
CC	domains. CR5 expression is markedly induced during IL2-promoted	
CC	T-cell proliferation. CR genes and polypeptides (W08133-40) are	
CC	useful as diagnostic or therapeutic agents; CR gene sequences can	
CC	be used to detect and treat allelic mutations.	
CC	Sequence 1960 bp; 402 A; 622 C; 523 G; 413 T;	

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Query Match: 5.6%; Score 69.6; DB 1; Length 1960;
Best Local Similarity 51.3%; Pred NO. 6.5e-05;
Matches 162; Conservative 0; Mismatches 134; Indels 0; Gaps 0.

QY 303 CCCGAGCCCTGGCGACACTCTCCGACCTTCGCTCCCACTCCGATTCACGGCGCA 362
      |||||||
Db 260 CCCGAGCCCGAGAGAGTGAAGCCAAAGTCTCTGGACCCGAGAGAGATCTGCTGTGCA 319
      |||||||

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QY 363 TCACGCGACACGAGCGCGCTCCTGGACGCGCTTCATTATGGGACACCCCTGAGCGTC 422
 Db 320 TAGCCAAACACTTCTCCACTTCTGGGAACTGGCTGATATGGGGTTTCATTACGGCCA 379
 QY 423 ACGGGGCGCACGAGCGCGCTGCGTCCGAGCCCGTGGCACCTTCTTGTCGGGACAGTC 482
 Db 380 GCGAGGCGCCGCAACACTTGCAGAAAGTGCAGAAAGCGACGTTCTTAGTACGTAGACGCA 439
 QY 483 GTCAACGGAATGCTTCTTGCGCGCTACGCGTGAAGATGCGTTTGGGGCCCAAGACATCC 542
 Db 440 CGCACCCCACTTACTCTGTTCACGCTGTCAATGAAACCACTGCGGCCCCACCAATGTAC 499
 QY 543 GCGTGCACCTTCAGAGCGCGCGCTTCTCACTTGCACGCGCACCGCCGAGACCTTGCAGTCC 602
 Db 500 GCATTGAGTATGCGCACTTCAGCTTCGCTGTGACATCCAACTCTGTTCAGGCCACGCA 559
 QY 603 TTTTCAGAGCTGCTGA 618
 Db 560 TCCTGGCGTTTCGGA 575

RESULT	11
ID	X53491/c
AC	X53491 standard; DNA; 114955 BP.
DT	05-JUL-1999 (first entry)
KW	Human adenovase A1 receptor antisense oligonucleotide fragment.
KW	Antisense oligonucleotide; multiple target; antisense treatment;
KW	Impaired respiration; inflammation; lung disease;
KW	pulmonary vasoconstriction; inflammation; allergic rhinitis;
KW	acute asthma; allergy; asthma; Impaired respiration;
KW	respiratory distress syndrome; pain; cystic fibrosis;
KW	pulmonary hypertension; pulmonary vasoconstriction; emphysema;
KW	chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
KW	colon cancer; breast cancer; lung cancer; pancreatic cancer;
KW	hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
KW	prostate cancer; ss.
OS	Synthetic.
PN	MO9913866-A1.
PD	25-MAR-1999.
PF	17-SEP-1998; UI9419.
PR	09-JUN-1998; US-093972.
PR	17-SEP-1997; US-059160.
PA	(UYEC-) UNIV EAST CAROLINA.
PI	Nyce JW;
DR	Wpi. 99-229400/19.
PT	New antisense oligonucleotides used in treatment of, e.g. pulmonary
PS	vasoconstriction
FS	Disclosure; Page 37; 120pp; English.
CC	The specification describes antisense oligonucleotides (X52869-X5271)
CC	directed against at least 2 mRNAs selected from target genes, coding and
CC	non-coding regions of RNAs corresponding to target genes, gene
CC	initiation codons, genomic flanking regions, intron-exon borders, the
CC	5'-end, the 3'-end and the junction between coding and non-coding
CC	regions and all segments of RNAs encoding proteins associated with one
CC	or more diseases, conditions or mixtures. The antisense oligonucleotides
CC	may be derived from sequences X5272-74. These multiple target
CC	oligonucleotides (specifically X5280-271) can be used for the antisense
CC	treatment of diseases and conditions. Typical diseases and conditions
CC	are those associated with impaired respiration and inflammation,
CC	including lung diseases, pulmonary vasoconstriction, inflammation,
CC	allergic rhinitis, acute asthma, allergies, asthma, Impaired respiration,
CC	respiratory distress syndrome, pain, cystic fibrosis, pulmonary
CC	hypertension, pulmonary vasoconstriction, emphysema, chronic obstructive
CC	pulmonary disease (COPD), and cancers such as leukemias, lymphomas,
CC	carcinomas e.g. colon cancer, breast cancer, lung cancer, pancreatic
CC	cancer, hepatocellular carcinoma, kidney cancer, melanoma, hepatic
CC	metastases, as well as all types of cancers which may metastasize or have
CC	metastasized to the lungs, including breast and prostate cancer.
CC	Sequence 114955 BP; 6071 A; 29417 C; 36712 G; 21328 T;
CC	Sequence 114955 BP; 6071 A; 29417 C; 36712 G; 21328 T;

Query Match 5.28; Score 64.4; DB 1; Length 114955;

Best Local Similarity 32.6%; Pred. No. 0.0002;
Matches 228; Conservative 86; Mismatches 376; Indels 9; Gaps 3;

OY	47	GGGGCTGTGTGGCGGGCCCTGTGCCAACCGAGACGGCCGGCTACTGCTGTGTCCCCCA	106
Db	105010	VGGCCVNNHNNNSGGCCCCGGCCGGCCGGCCGGCCGGCCGGCCVGGCNGNHHNNNSGGCCCCGGCC	1049511
OY	107	TGACGCAGCCCCCGAGCCTATGTGGCCACCCTTCAGCTGTGGCCCTTCAGTAGAGTGA	166
Db	104950	GGCGGGCCCGCVGGCGVCAGNNHHNNNSGGCCCCGGCCGGCCGGCCCGCCCGVGGCCVCGGNH	1048911
OY	167	GCACGCAACCAAGGTGGACCGCCGACAATGTGATTCTCCCGGACGACGACCCCGACGGCGG	226
Db	104890	NNNSGGCCVGGCGNNHHNNNSVGGCCVGGCGNNHHNNNSVGGCCVGGCGNNHHNNNSCVVG	1048311
OY	227	TGAGAGCCCTCTGTGCTGCTGTCTTGCTGNCCTGGCACGGGGCCCCCGTGGACCCCGGCC	286
Db	104830	CCVGGCGNNHHNNNSCCCGGGCCVGGCGGNNHHNNNSGCCCVGGCCVGGCGNNHHNNNSGCC	1047111
OY	287	TGCCCGCGGCTCCAGACCCCACGCCCTGGCGACACTCATCTTCGACACTTTCGGCTCCAC	346
Db	104770	VGGCGVGGCGNNHHNNNSGC--GCCCVGGCCVCGGNNHHNNNSGGCCGGCCVGGCGVGGGN	1047131
OY	347	TCCGATTACGGGCGCATATCACCGGACACAGCGCGCTCTGAGACGCTTCGGCTTTATTGG	406
Db	104712	NHNNSGGCGCCCGCVGGCGVGGCGNNHHNNNSGGCGCCCGCCVGGCCVGGCGNNHHNNNSCG	1045331
OY	407	GGACCCCTG-----AGGGTCAGGGGGCGACAGAGGGGTGGGTGGCGAAGCCGTGGGC	460
Db	104652	CGGCCCGVGGCCVGGCGGNNHHNNNSGGCGGGCCCGCCVGGCCVGGCGNNHHNNNSGGCGGC	1045931
OY	461	ACCTTCTGTGTGCGCGACAGTGTCAACGGAACGTCTTTCGCGGCTCACGCTGAAGATG	520
Db	104592	GCCCGGCGVCGGNNHHNNNSGGCGGGCGGGCCCGCCVGGCCVGGCGNNHHNNNSCGCGGGCG	1045333
OY	521	GCTTGGGGCCCCACAGAGCATCCGCGTGCACTTCAGGCGGGCGCTTCCACTTGTGACGCG	580
Db	104532	CGCCCGVGGCCVGGCGNNHHNNNSGGCGGGCGGCCCGCCVGGCGVGGCGNNHHNNNSGGCGG	1044731
OY	581	AGCCGCGAGACTTCGACGCTTTGGAGTGTGTGAGACATGAGGGGGGGCGCGCG	640
Db	104472	CGCGGCGCCCGVGGCCVGGCGNNHHNNNSGGCGGGCGGGCG--CCVGGCCVGGCGNNHN	1044141
OY	641	CGCATGTTGGGGGCGCCGCTGCGCACGCGCGCGCTGCGGCGCTGACGAGACTGTGTGCG	700
Db	104413	NSCGGCGCGGGCGGCGCGCCVGGCGVGGCGNNHHNNNSCGCGCGGGGGCGGCCCGVGGC	1043541
OY	701	CAGCGCATCTGTGGCGCGCGGTGGTGGCGGAGAAGCTGGCG	739
Db	104353	CVGCGNNHHNNNSGCCGCGCGGCGCGCCVGGCCV	104315
RESULT	12		
ID	X53491		
AC	X53491 standard; DNA; 114955 BP.		
DT	05-JUL-1999 (first entry)		
DE	Human adenosine A1 receptor antisense oligonucleotide fragment.		
KW	Antisense oligonucleotide; multiple target; antisense treatment;		
KW	impaired respiration; inflammation; lung disease;		
KW	pulmonary vasoconstriction; inflammation; allergic rhinitis;		
KW	acute asthma; allergy; asthma; impeded respiration;		
KW	respiratory distress syndrome; pain; cystic fibrosis;		
KW	pulmonary hypertension; pulmonary vasoconstriction; emphysema;		
KW	chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;		
KW	colon cancer; breast cancer; lung cancer; pancreatic cancer;		
KW	hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;		
KW	prostate cancer; sa.		
OS	Synthetic.		
PN	WO9113886-A1.		
PD	25-MAR-1999.		
PF	17-SEP-1998; U19419.		
R	09-JUN-1998; US-093972.		

PR 17-SEP-1997; US-059160.
PA (UYEC-) UNIV EAST CAROLINA.

PT New antisense oligonucleotides used in treatment of, e.g. pulmonary
PT vasoconstriction
PS Disclosure: Page 37, 120pp, English.
CC The specification describes antisense oligonucleotides (X52869-X53271)
CC directed against at least 2 mRNAs selected from target genes, coding and
CC non-coding regions of RNAs corresponding to target genes, gene
CC initiation codons, genomic flanking regions, intron-exon borders, the
CC 5'-end, the 3'-end and the juxta-section between coding and non-coding
CC regions and all segments of RNAs encoding proteins associated with one
CC or more diseases, conditions or mixtures. The antisense oligonucleotides
CC may be derived from sequences X53572-74. These multiple target
CC oligonucleotides (specifically X53180-271) can be used for the antisense
CC treatment of diseases and conditions. Typical diseases and conditions
CC are those associated with impaired respiration and inflammation,
CC including lung diseases, pulmonary vasoconstriction, inflammation,
CC allergic rhinitis, acute asthma, allergies, asthma, impeded respiration,
CC respiratory distress syndrome, pain, cystic fibrosis, pulmonary
CC hypertension, pulmonary vasoconstriction, emphysema, chronic obstructive
CC pulmonary disease (COPD), and cancers such as leukemias, lymphomas,
CC carcinomas e.g. colon cancer, breast cancer, lung cancer, pancreatic
CC cancer, hepatocellular carcinoma, kidney cancer, melanoma, hepatic
CC metastases as well as all types of cancers which may metastasize or have
CC metastasized to the lungs, including breast and prostate cancer.
SQ Sequence 114955 BP: 6071 A; 29417 C; 36712 G; 21328 T;

Query Match	Score	DB 1;	Length
4.48;	53.8;	DB 1;	114955;

Matches 214; Conservative 84; Mismatches 415; Indels 1; Gaps 1;

QY	25	CTGGGTACCCGCTCTCGCTCTTGGGGTCTTTGGCCGCTGTGGACACCGGAGCCGG	84
Db	104242	CBGGGGCGCGCCGCGCGGGGCGGSSNNNDNCCGCBGGCCBGGGCGCGCCGCGCGG	104301
QY	85	CTCAGCTCTCTCTCTCTCCCATTCAGCGACGCCCGGAGCGCTATGGCCACCCCTCAGC	144
Db	104302	CCSNNNDNNCCGCBGGGCGCBGGGCGCGCGCGCGCGGCGGSSNNNDNNCCGCBGGC	104361
QY	145	TGGCCCCCTCGAGTTGGATTGGTAGCAGCAACACAGTGGCAGCGGACAATTCGATTC	204
Db	104362	GCGCGCGG-CGCGCGGGSSNNNDNNCCGCBGGCCBGGGCGCGCCCGCGCCGSSNNNDNNCC	104420
QY	205	GGCAGCAGAGGCCCCGAGGCGGGGTGACAGCCCTCTGCTCTCGTCTTGTCGTCCGCGAGC	264
Db	104421	GCBBGCBGGGGCGCGCGCGCGCGCGSSNNNDNNCCGCBGGCCBGGGCGCGCGCGCGCSN	104480
QY	265	GGCCCCCGTGTCTCCCGCGGCTTGCCCGGCGGTCCAGCCCAAGCCCTTGGCACACTCA	324
Db	104481	NNDNNCCGCBGGGCGCBGGGCGCGCGCGCGSSNNNDNNCCGCBGGCCBGGGCGCGCGCG	104540
QY	325	CTTCCGACCTTCCGCTCCCACTCCGATTACCGGCGCATCAGCGGAGCACCGCGCTCT	384
Db	104541	GSSNNNDNNCCGCBGGGCGCBGGGCGCGCGCGSSNNNDNNCCGCBGGCCBGGGCGCGCGCC	104600
QY	385	GGAGCGCTGGGGGCTTCTATTGGGGAGCCCTGACGCTGACAGGGGGCAGCAGGGGCGG	444
Db	104601	SSNNNDNNCCGCBGGGCGGGGCGCGCGCGSSNNNDNNCCGCBGGCCBGGGCGCGCGSSNNND	104660
QY	445	TGCCAGACCCGATGGGACACTTCTTGTGTGTCGACAGTCGTCAACGGGAACCTCTTTCGC	504
Db	104661	NNCGCGGGGCGCBGGGCGCGCGCGSSNNNDNNCCGCBGGCCBGGGCGCGCGSSNNNDNNCCGCBG	104720
QY	505	GCTCAGCGTGAAGATGGCTTTCGGGCCCCACGACGACATCCGCGTGCACATTCCAGGCGCGCG	564
Db	104721	CCBGGGCGCGSSNNNDNNCCGCBGGGCGCBGGGCGCGCGSSNNNDNNCCGCBGGGCGCGSSNNND	104780
QY	565	CTTCCACTTTGGAGCGCAGCGCGCGCAGACCTTCGACTGCTTTTGGAGCTGCTGGAGGACAT	624
Db	104781	NNCGCGGGGCGCGGGCGSSNNNDNNCCGCBGGGCGCBGGGCGCGCGCGSSNNNDNNCCGCBGGC	104840

FT	CDS	33140..34984	/tag- ad	/product- "ORF#22a protein"	/note- "encoded protein shown in W72226"
FT		33386..34984			
FT	CDS		/tag- ae	/product- "ORF#22b protein"	/note- "encoded protein shown in W72227"
FT					
FT	CDS		/tag- af	/product- "ORF#23 protein"	/note- "encoded protein shown in W72188"
FT					
FT	CDS		/tag- ag	/product- "ORF#24 protein"	/note- "encoded protein shown in W72189"
FT					
FT	CDS		/tag- ah	/product- "ORF#25 protein"	/note- "encoded protein shown in W72190"
FT					
FT	CDS		/tag- ai	/product- "ORF#26 protein"	/note- "encoded protein shown in W72191"
FT					
FT	CDS		/tag- aj	/product- "ORF#27 protein"	/note- "encoded protein shown in W72192"
FT					
FT	CDS		/tag- ak	/product- "ORF#28 protein"	/note- "encoded protein shown in W72193"
FT					
FT	CDS		/tag- al	/product- "ORF#29 protein"	/note- "encoded protein shown in W72194"
FT					
FT	CDS		/tag- am	/product- "ORF#30 protein"	/note- "encoded protein shown in W72195"
FT					
FT	CDS		/tag- an	/product- "ORF#31 protein"	/note- "encoded protein shown in W72196"
FT					
FT	CDS		/tag- ao	/product- "ORF#32 protein"	/note- "encoded protein shown in W72197"
FT					
FT	CDS		/tag- ap	/product- "ORF#33 protein"	/note- "encoded protein shown in W72198"
FT					
FT	CDS		/tag- aq	/product- "ORF#34 protein"	/note- "encoded protein shown in W72199"
FT					
FT	CDS		/tag- ar	/product- "ORF#35 protein"	/note- "encoded protein shown in W72200"
FT					
FT	CDS		/tag- as	/product- "ORF#36 protein"	/note- "encoded protein shown in W72201"
FT					
FT	CDS		/tag- at	/product- "ORF#37 protein"	/note- "encoded protein shown in W72202"
FT					
FT	CDS		/tag- au	/product- "ORF#38 protein"	/note- "encoded protein shown in W72203"
FT					